

WHAT IS CLAIMED IS:

1. An electronic circuit equipment using a multilayer circuit board on which a semiconductor chip is mounted, comprising:

a thin film capacitor provided on said multilayer circuit board, wherein a first electrode of said thin film capacitor and a first wiring of said multilayer circuit board are electrically connected to each other, a second electrode of said thin film capacitor and a second wiring of said multilayer circuit board being electrically connected to each other, and a thin film dielectric of said thin film capacitor is formed by being grown epitaxially with said first electrode as its base.

2. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein said multilayer circuit board includes a resin and a conductor, said thin film capacitor is buried in said resin, and at least one of electrical connections between said wirings and said electrodes is established via a hole bored in said resin.

3. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein said first electrode and said first wiring are formed of materials different from each other, and have the same pattern, and are laminated.

4. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein

an area of said second electrode is narrower than an area of said thin film dielectric, and said second electrode is located on an inner side of said thin film dielectric.

5. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein, in order to prevent an electrical short-circuit between said first electrode and said second electrode, said electrodes are insulated from each other with a material that is the same as a material of said thin film dielectric.

6. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein said first electrode is a metal selected from a group including Ru, Pt, and Pd.

7. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 6, wherein said thin film dielectric is formed of strontium titanate.

8. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein said first electrode has a first connection layer positioned on a plane of said first electrode opposite to said thin film dielectric and formed of a metal different from a conductor of said first electrode, said first connection layer being a metal selected from a group including Cr, Mo, and Ti.

9. The electronic circuit equipment using said

multilayer circuit board as claimed in Claim 1, wherein said second electrode has a second connection layer positioned on a plane facing said thin film dielectric and formed of a metal different from a conductor of said second electrode, said second connection layer being a metal selected from a group including Cr, Mo, and Ti.

10. The electronic circuit equipment using said multilayer circuit board as claimed in Claim 1, wherein, of said first electrode and said second electrode, an electrode that is positioned nearer to a conductor of a transmission line formed on said multilayer circuit board is set at a grounding potential.